

Foreign Agricultural Service *GAIN* Report

Global Agriculture Information Network

Required Report - public distribution

GAIN Report #KS2033

Date: 7/16/2002

Korea, Republic of Solid Wood Products

Annual

2002

Approved by: **Daryl A. Brehm**

U.S. Embassy, Seoul

Prepared by: Sunchul Choi

Report Highlights: GDP growth rate in 2002 is forecast at between 6 - 7, doubled from the previous year. In the first quarter of 2002, the Korean economy grew 5.7 percent. Forestry Administration estimates the CY 2002 total consumption of wood products at 27.86 million CUM on the basis of roundwood, composed of the imported wood products of 26 million CUM and 1.55 million CUM of local wood products. Korean self-sufficiency rate of all wood products remains unchanged at 5.6 percent from the previous. In 2002, the wood frame housing is expected to be on track because Korean housing policy focuses on more single family and low rise housing as they have planned. The success of burn test on major structural systems of light weight wood frame houses is expected for the Korean building code to allow multi family food frame housing. Korean government is in the process of revising the entire building code system in an effort to move to performance based standards and is expected to issue a completely new building code this year.

Table of Contents

SECTION I. SITUATION AND OUTLOOK	2
SECTION II. STATISTICAL TABLES	6
Strategic Indicator Tables	6
STRATEGIC INDICATOR TABLE: FOREST AREA	6
STRATEGIC INDICATOR TABLE: CONSTRUCTION MARKET	
STRATEGIC INDICATORS TABLE: FURNITURE & INTERIORS MARKE	
STRATEGIC INDICATOR TABLE: MATERIAL HANDLING MARKET	10
STRATEGIC INDICATOR TABLE: WOOD PRODUCTS SUBSIDIES	11
STRATEGIC INDICATOR TABLE: FOREST PRODUCT TARIFFS AND	
TAXES	12
PS&D Tables and Trade Matrices	1.4
Temperate Hardwood Logs PSD	
Import Trade Matrix- Temperate Hardwood Logs	
Tropical Hardwood Logs PSD	
Import Trade Matrix- Tropical Hardwood Logs	
Softwood Logs PSD	
Import Trade Matrix- Softwood Logs	
Value of Logs Imports per Country	
Temperate Hardwood Lumber PSD	
Import Trade Matrix- Temperate Hardwood Lumber	
Hardwood Lumber Imports From U.S.	
Tropical Hardwood Lumber PSD	
Import Trade Matrix- Tropical Hardwood Lumber	
Softwood Lumber PSD	
Import Trade Matrix- Softwood Lumber	
Softwood Lumber Imports From the U.S.	
Value of Lumber Imports per Country	
Veneer PSD	
Import Trade Matrix- Veneer	
Value of Veneer Imports per Country	
Other Tables	
Supply of Domestic Roundwood	
Wood Products Production	
Value of Domestic Construction Orders Comparison for 2000 and 2001	
Building Construction Permits by Structure	
Building Construction Permits by Use	
Housing Starts per Type	
Import of Wood Frame Housing Per Country	
Production of Wood-Based Products	
Value of Total Forest Product Imports	37

Value Comparison of Forest Product Import for January-April	38
Volume of Forest Product Imports	39
Forest Situation/Outlook	40
Solid Wood Products Situation/Outlook	40
Trade	40
Overview/Outlook	40
Competition	41
Market Development Strategies	42
MARKET SEGMENT ANALYSIS	42
Construction Sector	42
Overview	42
Marketing	
Trade	44
Furniture & Interiors Sector	45
Overview	45
Marketing	45
Trade	46
Material Handling Industry	46
Policy	46

GAIN Report #KS2033 Page 2 of 45

SECTION I. SITUATION AND OUTLOOK

GDP growth rate in 2002 is forecast at between 6 - 7, doubled from the previous year. In the first quarter of 2002, the Korean economy grew 5.7 percent. Unemployment figures have declined to 2.9 percent in May due to an increase of employment in construction, service sector, semi-conductors, automobiles and communication equipment.

Forestry Administration estimates the CY 2002 total consumption of wood products at 27.86 million CUM on the basis of roundwood, composed of the imported wood products of 26 million CUM and 1.55 million CUM of local wood products. Total imports of round wood equivalent are classified into 7.4 million CUM for logs and 18.9 million CUM roundwood equivalent for lumbers and processed wood products. Korean self-sufficiency rate of all wood products remains unchanged at 5.6 percent from the previous.

The U. S. market share, based on value, in 2001 dropped to 10 percent mostly because of competition in temperate hardwood lumber from China, tropical hardwood lumber from Indonesia, and softwood lumber from New Zealand. The U.S. industry continues to face strong competition, particularly from New Zealand, Chile, Russia and Australia in roundwood, and Malaysia, Indonesia, China, Canada and Chile in lumber, as Korea still buys products based on price, not quality and durability.

During the first four months of CY2002, wood products imports increased by 28 percent to US\$573 million compared to the same period inCY2001. However, the United States exports slightly declined by 4 percent for the period as Korea's decreased imports of lumber, particle board, door/windows and plywood has been partly offset by the increased imports of logs, veneer and fiberboard. Though the demand for U.S. hardwood remains strong to date in 2002, hardwood lumber has been a victim suffered from the substitution of solid wood for the cheaper-priced composite wood products and tropical wood products.

The Ministry of Construction and Transportation (MOCT) has set the CY 2002 goal for new housing starts at 550,000 units. New housing starts in CY2001 totaled 529,854 units, up 22.2 percent from 2000, which exceeded the targeted 450,000 units government had set due to a greater demand of housing. With greater supply of housing units continued, the housing supply ratio, the relation between the number of houses and the number of houses, is expected to reach 100 percent this year. Building starts for the first five months in 2002 sharply increased 97.8 percent to 256,210 units from last year's 129,513 units.

Although the building permits for wood frame house increased slightly, the number of buildings was decreased to 1,252 units or down 4.4 percent due to the higher cost influenced by the currency depreciation against U.S. dollar in 2001. Of the wood frame house, the 2 X 4 structure is accounted for 80 percent with the rest of log home and post and beam structure. In 2002, the wood frame housing is expected to be on track because Korean housing policy focuses on more single family and low rise housing as they have planned. The success of burn test on major structural systems of light weight wood frame houses is expected for the Korean building code to allow multi family food frame housing. Korean government is in the process of revising the entire building code system in an effort to move to performance based standards and is expected to issue a completely new building code this year.

The furniture and interior sectors have traditionally been the largest users of U.S. hardwoods. However, furniture sales

GAIN Report #KS2033 Page 3 of 45

has been slow even under the economic boom of construction sector while the demand for renovation materials has increased. Furniture industry expects furniture market to grow next year because it is typical to take one and half years of an economic time-lag following the boom of construction sector.

Annual pallet production is estimated at 12 million units worth about US\$200 million in 2002 and 2003, respectively. The Korea Pallet Association (KPA) expects growth rate of pallet production in 2002 to be similar to the previous year due to the requirement of certificates for heat treatment of wood pallets effective on February 2002 in China.

Korean National Plant Quarantine Service (NPQS) has demanded a phytosanitary certificate for the shipment or an evidence that the soft maple does not belong to the big leaf maple. The NPQS has also strengthened its quarantine regulations for the pine products requiring a heat treatment certificate. Due to the pine wood nematode concern, Korea has banned imports of pine and larch products from USA, Canada, China, Japan and Portugal. Kiln dried lumber is allowed for the entry in Korea subject to the phytosanitary certificate stating that the lumber is kiln dried at 56 degree by Celsius fro 30 minutes.

Over the next 3-5 years, trade volume is expected to rebound step by step in tandem with the expanding economy boosted by the construction sector. Significant expansion in this market is not foreseen over the intermediate period unless tariffs are reduced.

GAIN Report #KS2033 Page 4 of 45

SECTION II. STATISTICAL TABLES

Strategic Indicator Tables

STRATEGIC INDICATOR TABLE: FOREST AREA

STRATEGIC INDICATOR TABLE: FOREST AR	EA (million hectares/r	million cum)	
Country: Korea, Republic of	Previous	Current	Following
Report Year: 2002	Calendar Year	Calendar Year	Calendar Year
Total Land Area	9.94	9.94	9.94
Total Forest Area	6.422	6.414	6.406
of which, Commercial	4.965	5	5
of commercial, tropical hardwood	0	0	0
of commercial, temperate hardwood	1.7	1.7	1.7
of commercial, softwood	2.8	2.8	2.8
of forest area, non-commercial	1.457	1.4	1.4
Forest Type			
Of which, virgin	3.622	3.614	3.606
Of which, plantation	2.3	2.3	2.3
Of which, other commercial (regrowth)	0.5	0.5	0.5
Forest Ownership			
Nationally owned and no commercial access	0.41	0.41	0.41
Nationally owned, commercial logging permitted	1.028	1.03	1.03
Other publicly owned land, no commercial	0.127	0.13	0.13
access			
Other publicly owned, logging permitted	0.365	0.37	0.37
privately owned commercial forest	3.571	3.58	3.59
Total Volume of Standing Timber	407.6	427	447
Of which, Commercial Timber	314	327	340
Annual Timber Removal 1/	1.5	1.5	1.5
Annual Timber Growth Rate	6	6	6
Annual Allowable Cut	1.6	1.5	1.5
1/ If Removals exceeds growth rate, analyze impact	in text.		

GAIN Report #KS2033 Page 5 of 45

STRATEGIC INDICATOR TABLE: CONSTRUCTION MARKET

	. , .,	1	
STRATEGIC INDICATOR TABLE:			
CONSTRUCTION MARKET			
Country:Korea, Republic of	Previous	Current	Following
Report Year:2002	Calendar Year	Calendar Year	Calendar Year
Total Housing Starts (number of units)	529,854	550,000	550,000
Of which, wood frame	1,252	1,500	2,000
Of which, steel, masonry, other materials	528,602	548,500	548,000
Of total starts, residential	529,854	550,000	550,000
Of residential, single family	49,454	50,000	50,000
Of residential, multi-family	480,400	500,000	500,000
Of total starts, commercial	529,602	550,000	550,000
Total Value of Commercial Construction Market (\$US million)	22,280	24,000	25,000
Total Value of Repair and Remodeling Market (\$US million)	na	na	na
Are tariffs on softwood from the United States higher, equal or lower than softwood imported from other countries? 1/	equal	equal	equal
Are tariffs on plywood from the United States higher, equal or lower than plywood imported from other countries? 1/	equal	equal	equal
Are non-tariff barriers on softwood from the United States higher, equal or lower than softwood imported from other countries? 1/	equal	equal	equal
Are non-tariff barriers on plywood from the United States higher, equal or lower than plywood imported from other countries? 1/	equal	equal	equal
Are there market development programs for construction, softwood or plywood imports funded by foreign governments?	no	no	no
If yes, identify the following:			
Country(ies)			
Form(s) of competition: Export subsidy, trade show, trade servicing, permanent market representative (number), permanent office (location), or other. 2/	na	na	na
Estimated annual market expansion outlay (\$US million) by country	na	na	na

GAIN Report #KS2033 Page 6 of 45

Is the acceptability of U.S. style timber frame construction (i.e., per building codes, mortgage availabity, etc.) high, medium or low? 3/	low	low	low
Are consumer preferences for solid wood materials vis-a-vis non-wood materials in construction high, medium or low? 3/	high	high	high
From Post's experience, is the willingness of U.S. suppliers to deliver product per importers' specifications low, medium or high? 3/	medium	medium	medium
If price quotes for construction and structural wood products are available, identify the leading source(s)	Traders, Forestry Administration		
1/ If other than equal, explain in report text.			
2/ If "other", then explain in report text.3/ If low or medium, explain in report text.			

GAIN Report #KS2033 Page 7 of 45

STRATEGIC INDICATORS TABLE: FURNITURE & INTERIORS MARKET

STRATEGIC INDICATORS TABLE: FURNITURE & INTERIORS MARKET					
		-			
Country: Korea, Republic of	Previous	Current	Following		
Report Year:2002	Calendar Year	Calendar Year	Calendar Year		
Total Housing Starts (number of units)	529,854	550,000	550,000		
Total Number of Households)	14,478	14,600	14,780		
Furniture Production (\$US million)	2,700	3,000	3,200		
Interiors Market Size (\$US million)	2,300	2,750	3,200		
Total Furniture Imports (\$US million)	340	420	450		
Total Furniture Exports (\$US million)	254	230	200		
Are tariffs on hardwood from the United States higher, equal or lower than hardwood imported from other countries? 1/	equal	equal	equal		
Are non-tariff barriers on hardwood from the United States higher, equal or lower than hardwood imported from other countries? 1/	equal	equal	equal		
Are there market development programs for furniture or interiors market expansion funded by foreign governments?	none	none	none		
If yes, identify the following:	na	na	na		
Country(ies) 2/	na	na	na		
Form(s) of competition: Export subsidy, trade show, trade servicing, permanent market representative (number), permanent office (location), or other. 3/	na	na	na		
Estimated annual market expansion outlay (\$US million) by country	na	na	na		
From Post's experience, is the willingness of U.S. suppliers to deliver product per importers' specifications low, medium or high? 4/	high	high	high		
If price quotes for furniture and interiors products are available, identify the leading source(s)	na	na	na		
1/ If other than equal, explain in text.					
2/ If more than one country, report each country individually.					
3/ If "other", explain form of subsidy in text.					

GAIN Report #KS2033 Page 8 of 45

4/ If low or medium, explain in test.			
---------------------------------------	--	--	--

STRATEGIC INDICATOR TABLE: MATERIAL HANDLING MARKET

STRATEGIC INDICATOR TABLE: MATERIAL HANDLING MARKET			
Country: Korea, Republic of	Previous	Current	Following
Report Year:2002	Calendar Year	Calendar Year	Calendar Year
Total Value of Industrial Output (\$US million)	600	620	670
New Pallet Production (million units)	11	12	12
Are consumer preferences for solid wood pallets and packaging materials vis-a-vis non-wood materials high, medium or low? 1/	high	high	high
Are industry/trade preferences for repaired/recycled pallets over new pallets low, medium or high? 1/	high	high	high
From Post's experience, is the willingness of U.S. suppliers to deliver product per importers' specifications low, medium or high? 1/	na	na	na
Identify leading source(s) of price quotes:	producers	producers	producers
Are there market development programs for the materials handling market expansion funded by foreign governments?	no	no	no
If yes, identify the following:	na	na	na
Which Countries?	na	na	na
Form(s) of competition: Export subsidy, trade show, trade servicing, permanent market representative (number), permanent office (location), or other. 2/	na	na	na
Estimated annual market expansion outlay (\$US million) by country	na	na	na
1/ If low or medium, explain in text of report.			
2/ If "other", explain in text of report.			

GAIN Report #KS2033 Page 9 of 45

STRATEGIC INDICATOR TABLE: WOOD PRODUCTS SUBSIDIES

STRATEGIC INDICATOR TABLE: WOOD PRODUCTS SUBSIDIES					
THE TESTS IN THE PROPERTY OF T					
Country: Korea, Republic of	Previous	Current	Following		
Year of Report: 2002	Calendar Year	Calendar Year	Calendar Year		
Total Solid Wood Export Subsidy Outlay (\$US million)	none	none	none		
Is there a ban on the export of logs, lumber, or veneer? If yes, which?	none	none	none		
Are there export taxes (yes/no)? 1/	no	no	no		
If yes, for which products? (Identify export tax level in tariff table)	na	na	na		
Source(s) of Export Subsidy Information	na	na	na		
Total Wood Production Subsidy Outlay (\$US million)	na	na	na		
Are there any programs favoring the development of commercial forestry? 1/	yes	yes	yes		
If yes, Post best estimate of scope (thousands of hectares)	20	20	20		
If yes, Post's best estimate of financial outlay (\$US million)	100	100	100		
Source(s) of Production Subsidy Information	na	na	na		
Does the country support export expansion activities similar to the Cooperator Program?	no	no	no		
Which country markets are targeted?	na	na	na		
Which products are targeted?	na	na	na		
Are there significant wood products export expansion activities at the provincial or regional level?	no	no	no		
If yes, identify key players	na	na	na		
If yes, identify key market segments	na	na	na		
If yes, identify key country markets	na	na	na		
If yes, identify key products	na	na	na		
Post's estimate for combined outlay (\$US million)	na	na	na		
Source(s) of Provincial/Regional Support Information	na	na	na		
Are there other wood products export expansion activities? If yes, describe in report.	no	no	no		

STRATEGIC INDICATOR TABLE: FOREST PRODUCT TARIFFS AND TAXES

GAIN Report #KS2033 Page 10 of 45

(PERCENT)						
		T. :00	E :00	0.1		
G		Tariff	Tariff	Other	T 1 C	
Country:Korea, Rep of	Product	Current	Following	Import	Total Cost	Export
Report Year:2002	Description 1/	Year	Year	Taxes/Fee	of Import	Tax
4401	Wood Chips, fuel wood 2/	2	2	12		n
4403	Tropical Roundwood 3/	1	1	12		na
4403	Other Roundwood 3/	2	2	12		na
4404	Sticks etc	5	5	12		na
4405	Wood wool	5	5	12		na
4406	Railway ties	5	5	12		na
4407 Lumber		5	5	12		na
4408 Veneer 4/		5	5	12		n
4409 Fihished Lumber		8	8	12		n
4410 Particle board		8	8	12		n
4411 Fiberboard		8	8	12		na
4412	Plywood 5/	8	8	12		n
4413	Densified wood	8	8	12		n
4414	Wooden frames	8	8	12		n
4415	Packing cases	8	8	12		n
4416	Casks	8	8	12		na
4417	Tools	8	8	12		n
4418	Builders' joinery	8	8	12		n
4419	Tableware/Kitchenware	8	8	12		n
4420	Wood marquetry	8	8	12		n
4421	Other articles of wood	8	8	12		n
4422	na	na	na	12		n
4423	na	na	na	12		n
4424	na	na	na	12		n
4425	na	na	na	12		n
9406	Pre-fabricated Houses	8	8	12		na

1/ Insert additional lines for Commodity tariff identification should tariffs vary within the four-digit designation.

GAIN Report #KS2033 Page 11 of 45

- 2/ Quota tariff reduced to one percent for wood chips (for pulp).
- 3/ Quota tariff reduced to zero percent for all imported logs.
- 4/ Quota tariff reduced to 3 percent for all imported veneer thicker than 0.5 mm.
- 5/ Adjusted tariff increased to 13 percent for thicker than 6 mm.

Source: Korea Customs Service (KCS), Agricultural Affairs

GAIN Report #KS2033 Page 12 of 45

PS&D Tables and Trade Matrices

Temperate Hardwood Logs PSD

Temperate Harawood Logs For						
PSD Table						
Country	Korea, Repu	blic of				
Commodity	Temperate H	ardwood Log	S		1000 CUBIC	METERS
	Revised	2001	Preliminary	2002	Forecast	2003
	Old	New	Old	New	Old	New
Market Year Begin		01/2001		01/2002		01/2003
Production	680	521	700	550	0	550
Imports	260	267	280	300	0	300
TOTAL SUPPLY	940	788	980	850	0	850
Exports	0	0	0	0	0	0
Domestic Consumption	940	788	980	850	0	850
TOTAL DISTRIBUTION	940	788	980	850	0	850

Import Trade Matrix- Temperate Hardwood Logs

Import Trade Matrix	1	5	
Country	Korea, Republic of		
Commodity	Temperate Hardwood Logs		
Time period	JAN/DEC	Units:	1,000 CUM
Imports for:	2000		2001
U.S.	31	U.S.	18
Others		Others	
Russia	17	Russia	27
Malaysia	8	Malaysia	0
PNG	141	PNG	91
China	12	China	12
Solomon	21	Solomon	64
		Indonesia	18

GAIN Report #KS2033 Page 13 of 45

Total for Others	199	212
Others not Listed	19	37
Grand Total	249	267

Source:Korea Customs Service(KCS)

GAIN Report #KS2033 Page 14 of 45

Tropical Hardwood Logs PSD

11001001110101110000 2080102								
PSD Table								
Country	Korea, Repu	blic of						
Commodity	Tropical Har	dwood Logs			1000 CUBIC	METERS		
	Revised	2001	Preliminary	2002	Forecast	2003		
	Old	New	Old	New	Old	New		
Market Year Begin		01/2001		01/2002		01/2003		
Production	0	0	0	0	0	0		
Imports	600	484	600	450	0	400		
TOTAL SUPPLY	600	484	600	450	0	400		
Exports	0	0	0	0	0	0		
Domestic Consumption	600	484	600	450	0	400		
TOTAL DISTRIBUTION	600	484	600	450	0	400		

Import Trade Matrix- Tropical Hardwood Logs

Import Trade			
Matrix			
Country	Korea,		
	Republic of		
Commodity	Tropical		
	Hardwood		
	Logs		
Time period	JAN/DEC	Units:	1000CUM
Imports for:	2000		2001
U.S.	0	U.S.	0
Others		Others	
Malaysia	311	Malaysia	180
PNG	175	PNG	140
Solomon Is.	112	Solomon Is.	61
New Zealand	10	New Zealand	46
Russia	11		

GAIN Report #KS2033 Page 15 of 45

Total for Others	619	427
Others not Listed	63	57
Grand Total	682	484

Source:Korea Customs Service(KCS))

Softwood Logs PSD

PSD Table						
Country	Korea, Repu	blic of				
Commodity	Softwood Lo	gs			1000 CUBIC	METERS
	Revised	2001	Preliminary	2002	Forecast	2003
	Old	New	Old	New	Old	New
Market Year Begin		01/2001		01/2002		01/2003
Production	800	1012	900	1000	0	1050
Imports	6000	6318	6500	6700	0	7000
TOTAL SUPPLY	6800	7330	7400	7700	0	8050
Exports	0	0	0	0	0	0
Domestic Consumption	6800	7330	7400	7700	0	8050
TOTAL DISTRIBUTION	6800	7330	7400	7700	0	8050

Import Trade Matrix- Softwood Logs

Import Trade Matrix			
Country	Korea, Republic of		
Commodity	Softwood Logs		
Time period	JAN/DEC	Units:	1,000 CUM
Imports for:	2000		2001
U.S.	361	U.S.	326
Others		Others	
New Zealand	3364	New Zealand	4036
Russia	1511	Russia	1471
Australia	550	Australia	372
Chile	92		

GAIN Report #KS2033 Page 16 of 45

Total for Others	5517	5879
Others not Listed	62	113
Grand Total	5940	6318

Source:Korea Customs Service(KCS)

GAIN Report #KS2033 Page 17 of 45

Value of Logs Imports per Country

Korea: Value of Logs Imports per Country Unit: 1,000US\$					
Country	1999	2000	2001		
United States	70,768	77,208	75,692		
New Zealand	200,932	211,352	238,981		
Russia	72,988	98,253	98,096		
Malaysia	51,812	51,479	25,713		
PNG	45,647	38,033	24,641		
Chile	24,051	6,473	1,021		
Australia	22,871	36,337	23,423		
Solomon Is.	13,075	18,045	16,265		
Others	18,511	23,213	32,494		
Total	520,655	560,393	536,326		

Source: Forest Administration

GAIN Report #KS2033 Page 18 of 45

Temperate Hardwood Lumber PSD

Temperate Harawood Edinber 1	52					
PSD Table						
Country	Korea, Repu	blic of				
Commodity	Temperate H	ardwood Lun	nber		1000 CUBIC	METERS
	Revised	2001	Preliminary	2002	Forecast	2003
	Old	New	Old	New	Old	New
Market Year Begin		01/2001		01/2002		01/2003
Production	76	90	82	88	0	88
Imports	200	208	250	210	0	220
TOTAL SUPPLY	276	298	332	298	0	308
Exports	5	5	5	5	0	5
Domestic Consumption	271	293	327	293	0	303
TOTAL DISTRIBUTION	276	298	332	298	0	308

Import Trade Matrix-Temperate Hardwood Lumber

Import Trade Matrix			
Country	Korea, Republic of		
Commodity	Temperate Hardwood Lumber		
Time period	JAN/DEC	Units:	1000 CUM
Imports for:	2000		2001
U.S.	48	U.S.	39
Others		Others	
China	95	China	104
Canada	12	Canada	8
Malaysia	16	Malaysia	12
EU	4	Indonesia	37
Indonesia	40		
Total for Others	167		161

GAIN Report #KS2033 Page 19 of 45

Others not Listed	8	8
Grand Total	223	208

Source: Korea Customs Service(KCS)

Hardwood Lumber Imports From U.S.

Korea: Hardwood Lumber Imports From the U. S. (CUM and US\$ Thousand)							
Species	1999 2000			20	001		
	Volume	Value	Volume	Value	Volume	Value	
Oak	24,545	14,610	16,345	10,447	10,124	6,887	
Maple	21,000	14,992	13,547	10,484	11,655	8,416	
Poplar	2,301	1,031	1,889	1,002	1,214	611	
Basswood	1,794	1,057	1,543	975	640	631	
Ash	3,727	2,033	3,815	2,306	3,308	2,051	
Walnut	900	966	1,030	1,211	610	824	
Other	11,012	7,762	10,041	7,430	11,071	8,641	
Total	65,279	42,451	48,210	33,855	35,522	26,638	

Source: Korea Customs Service (KCS)

Korea: Hardwood Lumber Imports From the U. S. (CUM and US\$ Thousand)						
Species	2001	(1-3)	2002	(1-3)		
	Volume	Value	Volume	Value		
Oak	3,153	2,076	2,555	1,664		
Maple	2,823	2,063	3,363	2,321		
Poplar	340	173	457	209		
Basswood	163	138	240	273		
Ash	757	498	1,394	676		

GAIN Report #KS2033 Page 20 of 45

Walnut	234	277	105	121
Other	2,403	2,494	2,637	2,771
Total	9,873	7,719	10,056	6,704

Source: Korea Customs Service (KCS)

GAIN Report #KS2033 Page 21 of 45

Tropical Hardwood Lumber PSD

11 opicui 1 ui u vood Edinbei 1 5D								
PSD Table								
Country	Korea, Repu	blic of						
Commodity	Tropical Har	dwood Lumb	er		1000 CUBIC	METERS		
	Revised	Revised 2001 Preliminary			Forecast	2003		
	Old	New	Old	New	Old	New		
Market Year Begin		01/2001		01/2002		01/2003		
Production	146	77	140	50	0	40		
Imports	300	349	300	360	0	370		
TOTAL SUPPLY	446	426	440	410	0	410		
Exports	3	4	3	3	0	3		
Domestic Consumption	443	422	437	407	0	407		
TOTAL DISTRIBUTION	446	426	440	410	0	410		

Import Trade Matrix-Tropical Hardwood Lumber

Import Trade Matrix			
Country	Korea, Republic of		
Commodity	Tropical Hardwood Lumber		
Time period	JAN/DEC	Units:	1000CUM
Imports for:	1999		2000
U.S.	0	U.S.	0
Others		Others	
Malaysia	149	Malaysia	147
Indonesia	158	Indonesia	139
Total for Others	307		286

GAIN Report #KS2033 Page 22 of 45

Others not Listed	14	13
Grand Total	321	299

Source: Korea Customs Service(KCS)

GAIN Report #KS2033 Page 23 of 45

Softwood Lumber PSD

PSD Table						
Country	Korea, Repu	Korea, Republic of				
Commodity	Softwood Lu	mber			1000 CUBIC	METERS
	Revised	2001	Preliminary	2002	Forecast	2003
	Old	New	Old	New	Old	New
Market Year Begin		01/2001		01/2002		01/2003
Production	4070	4330	4200	4620	0	4840
Imports	200	227	250	330	0	350
TOTAL SUPPLY	4270	4557	4450	4950	0	5190
Exports	15	10	15	10	0	10
Domestic Consumption	4255	4547	4435	4940	0	5180
TOTAL DISTRIBUTION	4270	4557	4450	4950	0	5190

Import Trade Matrix- Softwood Lumber

Import Trade Matrix			
Country	Korea, Republic of		
Commodity	Softwood Lumber		
Time period	JAN/DEC	Units:	1,000 CUM
Imports for:	2000		2001
U.S.	13	U.S.	10
Others		Others	
Canada	43	Canada	51
New Zealand	39	New Zealand	50
Chile	42	Chile	41
Indonesia	2	Indonesia	0
Brazil	28	Brazil	22
China	13	China	8
South Africa	5	South Africa	0
Russia	24	Russia	30
Total for Others	196		202
Others not Listed	7		15

GAIN Report #KS2033 Page 24 of 45

Grand Total 216 2

Source: Korea Customs Service(KCS)

Softwood Lumber Imports From the U.S.

Korea: Softwood Lumber Imports From the U. S. (CUM and US\$ Thousand)								
Species	1999		20	000	200	2001		
	Volume	Value	Volume	Value	Volume	Value		
Cedar	232	92	300	131	3,011	1,868		
Douglas Fir	1,453	361	401	155	771	174		
Whitewood or Fir	996	460	2000	791	652	263		
Spruce	9,409	5,696	9,559	7,143	3,935	3,751		
Other	1,424	2,777	885	1,022	885	1,022		
Total	13,216	7,975	13,145	9,242	9,540	7,657		

Source: Korea Customs Service (KCS)

Korea: Softwood Lumber Imports From the U. S. (CUM and US\$ Thousand)							
Species	2001	2001(1-3) 2002(1-3)					
	Volume	Value	Volume	Value			
Cedar	69	32	384	126			
Whitewood or Fir	359	107	34	29			
Spruce	1,311	1,401	590	474			
Other	258	499	153	339			
Total	1,997	2,039	1,161	968			

Source: Korea Customs Service (KCS)

GAIN Report #KS2033 Page 25 of 45

Value of Lumber Imports per Country

Korea: Value of Lumber Imports per Country (Unit: 1,000US\$)						
Country	1999	2000	2001			
United States	51,099	43,695	34,403			
Malaysia	47,328	42,298	38,177			
Indonesia	60,715	56,026	66,249			
Chile	21,765	13,731	9,095			
China	26,130	31,179	26,402			
New Zealand	10,381	5,586	5,807			
Canada	14,849	21,001	17,752			
Brazil	14,906	17,823	11,339			
Others	13,780	13,859	14,519			
Total	260,953	245,198	223,743			

Source: Forest Administration

GAIN Report #KS2033 Page 26 of 45

Veneer PSD

V CHCCI I SD						
PSD Table						
Country	Korea, Repu	blic of				
Commodity	Hardwood V	eneer			1000 CUBIC	METERS
	Revised	2001	Preliminary	2002	Forecast	2003
	Old	New	Old	New	Old	New
Market Year Begin		01/2001		01/2002		01/2003
Production	0	0	0	0	0	0
Imports	185	258	200	260	0	290
TOTAL SUPPLY	185	258	200	260	0	290
Exports	0	0	0	0	0	0
Domestic Consumption	185	258	200	260	0	290
TOTAL DISTRIBUTION	185	258	200	260	0	290

Note: Included softwood veneer in import data.

Import Trade Matrix- Veneer

Import Trade Matrix			
Country	Korea, Republic of		
Commodity	Hardwood Veneer		
Time period	JAN/DEC	Units:	1000 CUM
Imports for:	2000		2001
U.S.	5	U.S.	5
Others		Others	
Malaysia	148	Malaysia	136
Brazil	18	Brazil	18
Chile	7	Chile	7
China	4	China	5
Total for Others	177		166

GAIN Report #KS2033 Page 27 of 45

Others not Listed	5	86
Grand Total	187	257

Note: Included softwood veneer.

Source: Korea Customs Service(KCS)

GAIN Report #KS2033 Page 28 of 45

Value of Veneer Imports per Country

value of veneer imports pe	Korea: Value of Veneer Imports per Country Unit: 1,000US\$						
Country	1999	2000	2001				
United States	11,065	13,084	13,478				
Malaysia	17,688	30,376	44,352				
Chile	2,235	1,927	1,639				
Brazil	2,861	5,943	1,513				
China	5,416	6,559	13,006				
EU	6,062	9,474	11,465				
Others	6,714	8,594	7,643				
Total	52,041	75,957	93,096				

Source: Forest Administration

GAIN Report #KS2033 Page 29 of 45

Other Tables

Supply of Domestic Roundwood

	Korea: Supply of Domestic Roundwood (1,000 CUM)						
Year	Pit props	Pulp	Lumber/Board	Total			
1995	139	405	512	1,055			
1996	109	392	694	1,195			
1997	104	367	591	1,062			
1998	110	406	912	1,428			
1999	117	410	1,167	1,694			
2000	112	552	928	1,592			
2001	140	366	1,027	1,533			

Source: Korea Forestry Administration

Wood Products Production

Korea: Wood Products Production (1,000 CUM)						
Items	1999	2000	2001			
Softwood Lumber	3,857	4,044	4,330			
Tropical Hardwood Lumber	244	142	77			
Temperate Hardwood Lumber	67	73	90			
Sub Total, Lumber	4,168	4,259	4,497			
Plywood	734	747	736			
Fiberboard	844	943	1,019			
Particle board	672	722	723			
Grand Total	6,418	6,671	6,975			

Source: Agricultural Affairs,

Korea Plywood Industry Association (KPIA)

GAIN Report #KS2033 Page 30 of 45

GAIN Report #KS2033 Page 31 of 45

Value of Domestic Construction Orders Comparison for 2000 and 2001

Korea: Value of Domestic Construction Orders Comparison for 2000 and 2001 (Billion Korean Won, By the Type of Construction)						
Sector	2000	2001	Changes(%)			
Building, subtotal	27,285	28,736	5			
-Dwelling	20,031	20,751	4			
-Office & Stores	3,461	4,004	16			
-Factory & Storage	1,031	955	-7			
-Public Office 1/	1,299	2,104	62			
-Others	1,463	948	-35			
Civil Engineering, subtotal	14,354	18,898	32			
-Forestry Conservancy & Water Control	301	139	-54			
-Agriculture & Fisheries	324	331	2			
-Roads & Bridge	6,793	9,304	37			
-Harbors& Airports	827	1,231	49			
-Railways & Track	1,097	2,986	172			
-Water Supply & Sewage	1,116	1,183	6			
-Generation of Electricity 2/	744	304	-59			
-Land Development 3/	1,427	1,256	-12			
-Dams	2	46	2,200			
-Installation of Machinery	1,465	1,790	34			
-Others	258	147	-43			
Other Construction, subtotal	139	132	-5			
Grand Total	41,778	47,793	14			

^{1/} Including schools and hospitals

Source: National Statistical Office (NSA)

^{2/} Including transmission, transformation and distribution

^{3/} Including gardens and grounds

GAIN Report #KS2033 Page 32 of 45

Building Construction Permits by Structure

9	Korea: Building Construction Permits by Structure (Floor area, Thousand Square meters)						
Year	Total	Ferro-Concrete	Brick & Stone	Wooden	Others		
1995	117,327	103,134	9,086	89	5,022		
1996	113,820	101,940	7,193	131	4,557		
1997	113,374	104,214	5,105	173	3,881		
1998	50,965	46,701	1,889	113	2,263		
1999	72,534	66,192	2,340	142	3,858		
2000	81,059	75,292	2,056	178	3,532		
2001	97,717	91,562	2,056	181	3,919		

Source: Ministry of Construction and Transportation (MOCT)

Building Construction Permits by Use

Korea: Building Construction Permits by Use (Floor area, Thousand Square meters)							
Year	Total	Dwelling	Commercial	Factory	Educational &Social	Other	
1995	117,327	62,614	28,549	13,727	6,281	6,157	
1996	113,820	61,062	26,862	11,921	6,289	7,682	
1997	113,374	62,677	27,918	8,796	6,603	7,379	
1998	50,965	31,156	8,753	2,796	3,983	4,279	
1999	72,534	44,606	11,746	7,824	4,478	3,882	
2000	81,059	41,283	18,882	11,646	5,126	4,121	
2001	97,717	47,856	25,888	13,538	5,534	4,901	

1/ Estimated by Agricultural Affairs.

Source: Ministry of Construction and Transportation (MOCT)

GAIN Report #KS2033 Page 33 of 45

Housing Starts per Type

	Korea: Housing Starts per Type ('000 units)						
Year	Total	Apartment	Single Family	Tenement	Rowhouse		
1996	592,132	462,548	61,263	18,210	5,011		
1997	596,435	484,949	52,948	19,219	39,319		
1998	306,031	262,879	23,773	7,363	12,016		
1999	404,715	345,345	33,772	7,640	17,958		
2000	433,488	331,579	34,777	10,242	56,890		
2001	529,854	267,401	49,454	8,592	204,407		
2002 (1-5)	256,210	115,117	23,125	4,152	113,816		

1/ Projection

Source: Ministry of Construction and Transportation

Import of Wood Frame Housing Per Country

Korea: Import of Wood Frame Housing Per Country (Unit: 1,000 US\$ on a CIF basis)								
Country	1999 2000 2001 2001 (1-4) 2002 (
United States	3,501	4,462	1,830	870	432			
Canada	934	1,872	1,401	620	531			
Finland	651	1,030	1,165	442	431			
Sweden	0	72	0	0	0			
New Zealand	302	0	24	24	0			
Australia	0	115	49	0	0			
Russia	61	107	73	0	0			
EU	101	114	362	191	26			
Others	60	289	141	103	57			
Total	5,610	8,061	5,045	2,250	1,477			

Source: Korea Customs Service

GAIN Report #KS2033 Page 34 of 45

GAIN Report #KS2033 Page 35 of 45

Production of Wood-Based Products

Korea: Production of Wood-Based Products (1,000 pieces)						
Year	Vehicle 1/	Furniture 2/	Sinkboard	Musical I	nstrument	
				Pianos	Guitars 3/	
1995	624	1,303	3,013	212	1,500	
1996	625	1,213	2,808	166	1,400	
1997	563	1,162	2,718	134	1,300	
1998	438	NA	2,327	92	1,150	
1999	731	NA	2,741	95	1,800	
2000	911	NA	2,492	98	1,430	
2001	794	NA	2,565	66	1,200	

^{1/} Bus, truck, and shipping container

Source: National Statistical Office

Korea Musical Instrument Industry Association (KMIIA)

^{2/} Freestanding wood-based furniture

^{3/} KMIIA's estimated data because official statistics do not include the number of guitar products made by small-medium sized companies.

GAIN Report #KS2033 Page 36 of 45

Value of Total Forest Product Imports

Korea:Value of Total Forest Product Imports (US\$ Million on a CIF)							
Description (H.S. No.)	Fr	om the World	1	From	the United St	ne United States	
	2000	2001	%	2000	2001	%	
Chips (4401)	84	81	-3.2	23	24	2.9	
Logs (4403)	560	536	-4.3	77	76	-2.0	
Lumber (4407)	245	224	-8.8	44	34	-21.3	
Veneer (4408)	76	93	22.6	13	13	0	
Finished Lumber (4409)	33	34	2.2	1.3	0.3	-72.8	
Particle Board (4410)	71	78	9.5	1.2	0.4	-66.7	
Fiberboard (4411)	81	94	16.8	3	2	-39.3	
Plywood (4412)	307	312	1.6	2.4	1.6	-32.8	
Door and Windows (4418)	29	32	9.6	3.2	2.4	-24.3	
Other Articles of Wood	82	87	5.8	2.3	3.2	35.2	
Total	1,568	1,570	0.2	171	158	-7.8	

Source: Korea Customs Service(KCS)

GAIN Report #KS2033 Page 37 of 45

Value Comparison of Forest Product Import for January-April

Korea: Value Comparison of Forest Product Import for January-April (US\$ Million on a CIF)										
Description (H.S. No.)	From the World			From the United States						
	2001	2002	%	2001	2002	%				
Chips (4401)	33	15	-55	10	0	na				
Logs (4403)	164	190	16	23	31	35				
Lumber (4407)	64	73	14	12	10	-16				
Veneer (4408)	24	33	38	4	5	25				
Finished Lumber (4409)	10	9	-10	0	0	0				
Particle Board (4410)	19	38	100	0.1	0	-100				
Fiber board (4411)	18	60	239	0.8	2	150				
Plywood (4412)	83	111	34	0.6	0.4	-33				
Door and Windows (4418)	7	12	71	0.6	0.5	-16				
Other Articles of Wood	26	32	23	0.9	0.2	-78				
Total	448	573	28	52	50	-3.8				

Source: Korea Customs Service(KCS)

GAIN Report #KS2033 Page 38 of 45

Volume of Forest Product Imports

Korea: Volume of Forest Product Imports (1,000CUM)										
Description (H.S. No.)	From the World			From the United States						
	1999	2000	2001	1999	2000	2001				
Chips (4401) 1/	1,180	1,083	1,068	312	285	295				
Logs (4403)	6,570	6,871	7,068	356	392	344				
Lumber (4407)	827	738	784	79	62	50				
Veneer (4408)	121	191	258	5	5	5				
Finished Lumber (4409) 1/	29	33	36	0.7	0.5	0				
Particle Board (4410)	377	485	595	10	5	1				
Fiberboard (4411)	217	380	491	17	10	5				
Plywood (4412)	791	980	1,095	3	2	1				
Door and Windows (4418) 1/	26	21	21	5	1	1				

1/1,000Metric Tons

Source: Korea Customs Service (KCS)

Agricultural Affairs readjusted the number of logs and lumber based on the KCS' statistics.

GAIN Report #KS2033 Page 39 of 45

SECTION III. NARRATIVE ON SUPPLY AND DEMAND, POLICY & MARKETING

Production

Forest Situation/Outlook

Total forested area, about 6.422 million hectares (HA), accounts for 64.6 percent of the total land area. Korea's forests are located predominantly in the cool-temperate zone with a small section in the warm-temperate zone along the southern coast.

Most of the domestic growing stock is around 30 - 40 years old with the greatest production made up of coniferous trees between 20-40 years old. Small diameter logs (below 30 centimeters) represent 97 percent of total log production. Because timber quality is low and the majority of trees are of small diameter, domestic roundwood is primarily processed into pitprop, lumber for crates, fiberboard, and wood chips for pulping.

The CY 2002 roundwood harvest is projected at 1.5 million CUM. Softwoods comprise 60 percent of the harvest followed by temperate hardwoods at 40 percent. For CY 2003, the outlook for domestic roundwood production is 1.6 million CUM, with softwoods (60 percent) and temperate hardwoods (40 percent) maintaining the dominant species harvested. With proper management, Korea projects that sustainable domestic production could satisfy more than 50 percent of total demand by the 2030s.

Forestry Administration estimates the CY 2002 total consumption of wood products at 27.86 million CUM on the basis of roundwood, composed of the imported wood products of 26 million CUM and 1.55 million CUM of local wood products. Total imports of round wood equivalent are classified into 7.4 million CUM for logs and 18.9 million CUM roundwood equivalent for lumbers and processed wood products. Korean self-sufficiency rate of all wood products remains unchanged at 5.6 percent from the previous.

Solid Wood Products Situation/Outlook

Though the Korean economy has been slow in CY2002, the lumber processing industry has been active to meet the greater demand from construction. The panel products industries also continued expanding their capacities to meet a greater demand of particle board and MDF from interior and furniture industries, who prefer to substitute the processed products laminated by veneer for lumber to save costs. Based on the first three months of 2002, the panel industry is expected to continue operating at more than 80 percent of capacity. For CY 2002, the outlook for the panel processing industry is expected to grow in accordance with economic growth boosted by deregulation of the construction sector in CY2001.

Trade

Overview/Outlook

During the first four months of CY2002, wood products imports increased by 28 percent to US\$573 million compared to the same period inCY2001. However, the United States exports slightly declined by 4 percent for the period as Korea's decreased imports of lumber, particle board, door/windows and plywood has been partly offset by the

GAIN Report #KS2033 Page 40 of 45

increased imports of logs, veneer and fiberboard. Though the demand for U.S. hardwood remains strong to date in 2002, hardwood lumber has been a victim suffered from the substitution of solid wood for the cheaper-priced composite wood products and tropical wood products.

During this same period, the imports of prepackaged homes under H. S. code of 9406 decreased 34 percent on a year-over-year basis, with decreases in orders reported from Finland, Canada and the United States. U. S. dimension lumber is not widely used in the wood frame housing market because Korean market is centered on price. Canadian SPF, a mixed species of Spruce, Pine and Fir is much more competitive than US dimension lumber, particularly given the exchange rate over the past year.

However, wood frame housing market remains strong in line with the increasing market of single family and low rice multi family housing. Using prepackaged housing materials which are fit for rather large-scale wood frame housing construction, small-sized builders would rather use dimension lumber, structural panel products and OSB imported by local distributors. Local distributors have stored the most competitive wood products in their warehouse such as dimension lumber and structural panel from Canada, OSB from France, red pine walled panel from Russia and walled panel and chemical treated deck from Finland. A major distributor reportedly purchased a sawmill in Canada in order to process dimension lumber to Korean market. In lieu of structural products, the U. S. has become a competitive supplier of wood based building products included door/window and moulding and millworks.

In CY 2001, total wood products imports similar to the previous year due to a decrease of logs and lumbers offset by a greater demand of veneer and panel products such as particle board and MDF from interior and furniture industries. The economic slowdown has continued encouraging the substitution of the panel products laminated by veneer for lumber. However, U.S. exports to Korea decreased 8 percent because of more competitive prices of logs and panel products from Southeast Asia, New Zealand, Chile and Russia.

In CY2001, U.S. export value of softwood lumber decreased 17 percent while quantity further decreased by 27 percent from the previous year. Spruce lumber was the major species of decrease due to the sharp reduction of piano.

The sluggish furniture sectors has discouraged the import of temperate hardwood lumber. In CY2001, U.S. exports of temperate hardwood lumber in value declined 21 percent from the previous year and continue to decline 13 percent for the first four months of CY2002. High substitution of panel products for lumber in the housing construction caused the import of hardwood lumber decreased.

Over the next 3-5 years, trade volume is expected to rebound step by step in tandem with the expanding economy boosted by the construction sector. Significant expansion in this market is not foreseen over the intermediate period unless tariffs are reduced.

Competition

The U. S. market share, based on value, in 2001 dropped to 10 percent mostly because of competition in temperate hardwood lumber from China, tropical hardwood lumber from Indonesia, and softwood lumber from New Zealand . The U.S. industry continues to face strong competition, particularly from New Zealand, Chile, Russia and Australia in roundwood, and Malaysia, Indonesia, China, Canada and Chile in lumber, as Korea still buys products based on price, not quality and durability.

GAIN Report #KS2033 Page 41 of 45

The primary competition for U.S. softwood logs are the radiata pine from New Zealand and Chile. Russian softwood is also entering the market, mainly through barter deals with Korean trading companies. The Russian government has continued to encourage the export of lumber and value added wood products while reducing the export of logs.

Market Development Strategies

The overall size of the domestic market is expected to continue expanding along with the economic recovery of the construction sector boosted by government support programs. Government deregulation on housing construction has encouraged local wood related industries to meet higher demand of structural material, furniture and interior. The housing construction industries plans to increase the housing supply for the second half of 2002.

Remodeling and reconstruction for old buildings have led to greater demand for hardwood veneer laminated products by developers who are increasingly using veneer based wood products to save construction costs. Their use of veneer based products is generating demand for particle board and MDF interior accessories, such as kitchen cabinets, doors, window and interior trimmings.

Zoning restrictions were removed allowing construction on land previously zoned for golf courses and for green-belt preservation. A new town project located at Pan-Gyo near Seoul is expected to be a good opportunity for wood frame house construction during 2005 - 2008. The housing site has at 3 million square meters, composed of 40 percent for single family houses, 18 percent for multi family houses and 42 percent for high rise apartments. Government has lifted restrictions on the green-belt area in the eleven cities near Seoul. Therefore, new housing land is available to build about 100,000 units of apartment in 2,100 acres, which is scheduled to construct in next five years.

MARKET SEGMENT ANALYSIS

Construction Sector

Overview

GDP growth rate in 2002 is forecast at between 6 - 7, doubled from the previous year. In the first quarter of 2002, the Korean economy grew 5.7 percent. Unemployment figures have declined to 2.9 percent in May due to an increase of employment in construction, service sector, semi-conductors, automobiles and communication equipment. Construction sector remained optimistic experiencing a 168.6 percent increase in orders compared to the same month last year. Despite this positive trend in the first quarter of 2002, consideration should be given to the impact that may result from upcoming presidential election, U. S. economic recovery, and the mixed won/dollar exchange rate. Strong Korean currency against U. S. dollar is expected to encourage the import of wood products for housing construction.

The Ministry of Construction and Transportation (MOCT) has set the CY 2002 goal for new housing starts at 550,000 units. New housing starts in CY2001 totaled 529,854 units, up 22.2 percent from 2000, which exceeded the targeted 450,000 units government had set due to a greater demand of housing. With greater supply of housing units continued, the housing supply ratio, the relation between the number of houses and the number of houses, is expected to reach 100 percent this year. Building starts for the first five months in 2002 sharply increased 97.8 percent to 256,210 units from

GAIN Report #KS2033 Page 42 of 45

last year's 129,513 units.

The renovation market targeting old apartments and office buildings has emerged as a new business for large developers since 2000. Older apartments are now rebuilding or renovating. Remodeling increases greater market opportunities for such wood products as flooring, wall panel, built-in furniture, door/window and trimming of ceiling parts. However, solid wood is not likely to be a major raw material in this market because of its higher price than composite products laminated by veneer. Veneer has great potential in this market because of the greater demand of composite products such as plywood, particle board and MDF is essential to use veneer as lamination.

Although the building permits for wood frame house increased slightly, the number of buildings was decreased to 1,252 units or down 4.4 percent due to the higher cost influenced by the currency depreciation against U.S. dollar in 2001. Of the wood frame house, the 2 X 4 structure is accounted for 80 percent with the rest of log home and post and beam structure. In 2002, the wood frame housing is expected to be on track because Korean housing policy focuses on more single family and low rise housing as they have planned.

Marketing

The MOCT has deregulated about 37.5 kilo square meters of greenbelt area in the suburb of Seoul from the restriction for the second half of this year. Low rice apartment and single family houses are planned to construct about 300,000 units in the deregulated area. They also decided not to allow the construction of high rice apartment at less than 300,000 square meters in the quasi-farmland, which are fit for single and low rice multi family housing construction. Housing policies recently released by government are focused on the balanced target of 50:50 between single family housing and high rice apartment by 2020.

The new town is planning to build total 20,000 units aimed at low density of population balanced between development and the environment at Pan-Gyo near Seoul during 2005-2008. There will be 6,000 single family and low rise multifamily units. Government has lifted restrictions on the green-belt area in the eleven cities near Seoul. Therefore, new housing land is available to build about 100,000 units of apartment in 2,100 acres, which is scheduled to construct in next five years.

Korea, as a member of OECD countries, is trying to introduce a bill of 5 days work per week targeting to implement the law this year. The new law could generate a substantial demand for weekend homes as the second house in the country side. The wood frame builders are excited to get a greater demand for wood frame houses.

After lifting the government intervention in the selling prices of new apartment since 1988, it has made a greater demand of high quality building materials created. U.S. wood products were used for flooring, system window, built-in furniture, stairs and mouldings. Consumers have shown their preference to install high quality floor and built-in furniture instead of wardrobe furniture. U.S. hardwood lumber found out a good demand for system window in the balcony, whose value reaches at one billion U.S.dollars.

AF&PA Seoul office has actively participated in housing exhibitions to promote wood frame housing construction: Kyung-Hyang Housing Fair for end users of wood products such as furniture, interior/remodeling, wood frame house builders and door/window manufacturers; Country Home Developers and Builders Trade Fair; Korea International

GAIN Report #KS2033 Page 43 of 45

Building Expo; Seoul Living Design Fair; Remodeling Show. Since 1996, the AF&PA has organized an annual two-week training program for Korean carpenters in an attempt to improve Korean carpenters' skill and knowledge on wood house construction.

It is now estimated that there are twenty colleges and universities across the nation that teach the technology of wood frame construction. This is thanks to U. S. efforts to transfer the technology of wood frame housing construction. The curriculum of wood frame construction was taught by only one university five years ago. It has extended to most professors and instructors of universities who had participated in the AF&PA technical training programs. Moreover, there are about ten wood frame training academies operated by private industry or vocational schools.

Policy

The success of burn test on major structural systems of light weight wood frame houses is expected for the Korean building code to allow multi family food frame housing. Korean government is in the process of revising the entire building code system in an effort to move to performance based standards and is expected to issue a completely new building code this year.

Trade

Korean imports of all wood products in 2001 were similar to the last year's, up 0.2 percent while U.S. export to Korea dropped by 8 percent. However, U.S. export of hardwood composed of veneer and log increased since the fourth quarter 2001 to meet the greater demand out of the housing construction and remodeling sectors. In 2002, U.S. export of hardwood to Korea is forecast to increase to meet the strong demand from the remodeling and housing construction sectors.

In 2001, imports of prepackaged housing decreased to US\$5 million, down 37 percent from the previous year and U.S. export plummeted to US\$1.8 million, down 59 percent . For the first four months of 2002, the import of prepackaged housing sharply dropped by 34 percent from the same period of previous year while U.S. export also declined by 50 percent.

As wood frame housing market remains strong in line with the increasing market of single family and low rice multi family housing, about 160 small-sized builders specialized in wood frame house construction has used imported dimension lumber, structural panel products and OSB from local distributors instead of using prepackaged housing materials which are fit for rather large-scale housing construction. Local distributors, on behalf of small-sized builders, have searched for the most competitive wood products such as dimension lumber and structural panel from Canada, OSB from France, red pine walled panel from Russia and walled panel and chemical treated deck from Finland. In lieu of structural products, the U. S. has become a competitive supplier of wood based building products included door/window and moulding and millworks.

Furniture & Interiors Sector

GAIN Report #KS2033 Page 44 of 45

Overview

The furniture and interior sectors have traditionally been the largest users of U.S. hardwoods. However, furniture sales has been slow even under the economic boom of construction sector while the demand for renovation materials has increased. Furniture industry expects furniture market to grow next year because it is typical to take one and half years of an economic time-lag following the boom of construction sector.

The interior market recorded a robust growth in 2001 and is expected to continue its growth in 2002 in line with strong consumer demand for interior decoration. Though the demand for U.S. hardwood remains strong to date in 2002, hardwood lumber has been a victim suffered from the substitution of solid wood for the cheaper-priced composite wood products and tropical wood products. Subcontractors who should meet their contract price for remodeling of old housing or interior finishes of new housing have been reluctant to use solid wood in order to save a cost. They have applied wrapping products for moulding and interior trim parts of new housings in apartment complex in lieu of solid wood. Veneer has been major raw materials to make composite products to save the cost of interior and furniture.

Interior work for remodeling and new apartment construction is mostly given to sub-contractors who are tending to stay away from solid wood. There is a reason for the substitution - cost ceiling set by the contractor and sub-contractors. Therefore, price factor is the most important to sub-contractors while consumers definitely prefer to solid wood.

The Interior Contractors Committee (ICC) forecasts the CY 2002 Korean interior market will sharply increase from the previous year because of a rapid growth in the construction sector. The 2002 projection is based on the interior industry's expanding in remodeling and reconstruction from commercial building to residential apartments.

Marketing

Prospects for the furniture market are closely linked to the continued growth of construction economy. Consumer's furniture preference shows younger couples focusing on modern fashion with simplicity and lower priced panel products and the middle aged going for classic style natural wood furniture like stand-alone style furniture. They have been a greater buyer of imported medium and high quality furniture. However, local manufacturers have substituted artificial coated paper for wood veneer to compete with lower priced furniture imported from the Southeast Asian countries.

For the promotion of hardwood, AF&PA Seoul continues holding the Biennial Furniture Design Competition to improve familiarity among local design students. During the fair of Seoul Living Design, AF&PA Seoul held a round table meeting with hardwood importers and local trade journalists to hear about buyers' concern, constraints and complaints on U. S. wood products. Their general concern was the high cost upon importing U.S. hardwood products.

Leading kitchen cabinet manufacturers influenced by the Living Design Fair initiated by the AHEC held their own design contest events. They call for applications in three categories to include design for multi family homes, interior design and furniture design.

Trade

In line with the strong demand of composite products from interior, the import of hardwood veneer and logs in 2001

GAIN Report #KS2033 Page 45 of 45

has continued increasing by 10 percent from the previous year. However, import of hardwood lumber has continued decreasing due to substituting composite products for solid wood in the interior and furniture.

For the first four months of 2002, as a result, overall imports of wood products decreased 28 percent from the same period of 2001 along with the 4 percent decrease from the U.S. Major species are paulownia, maple and white oak followed by ash, basswood and birch. In 2001, total import value of hardwood lumber dropped 16 percent from the previous year.

In 2002, the furniture industry estimates the furniture production to grow by 10 percent due to the growth of housing construction. Furniture import is expected to increase by 20 percent while export to decrease 9 percent from the previous year in line with the development of housing construction economy.

Material Handling Industry

Annual pallet production is estimated at 12 million units worth about US\$200 million in 2002 and 2003, respectively. The Korea Pallet Association (KPA) expects growth rate of pallet production in 2002 to be similar to the previous year due to the requirement of certificates for heat treatment of wood pallets effective on February 2002 in China.

The total pallet market hovered around 50 million units. Market share of wood pallets is at 70 percent, plastic pallets at 25 percent and other pallets such as iron and paper at 5 percent, respectively. Local pallet producers continue to increase the production of plastic pallets which have longer durability than wood and minimizes damage caused by nails in wood pallets. Spurring on demand for plastic pallets are requests from Australian and French importers for Korean exporters use plastic pallets to eliminate potential quarantine problems. KPA anticipates the market share of plastic pallet to grow to 30 percent in 5 years.

Policy

Korean National Plant Quarantine Service (NPQS) has demanded a phytosanitary certificate for the shipment or an evidence that the soft maple does not belong to the big leaf maple. The NPQS has also strengthened its quarantine regulations for the pine products requiring a heat treatment certificate. Due to the pine wood nematode concern, Korea has banned imports of pine and larch products from USA, Canada, China, Japan and Portugal. Kiln dried lumber is allowed for the entry in Korea subject to the phytosanitary certificate stating that the lumber is kiln dried at 56 degree by Celsius for 30 minutes.